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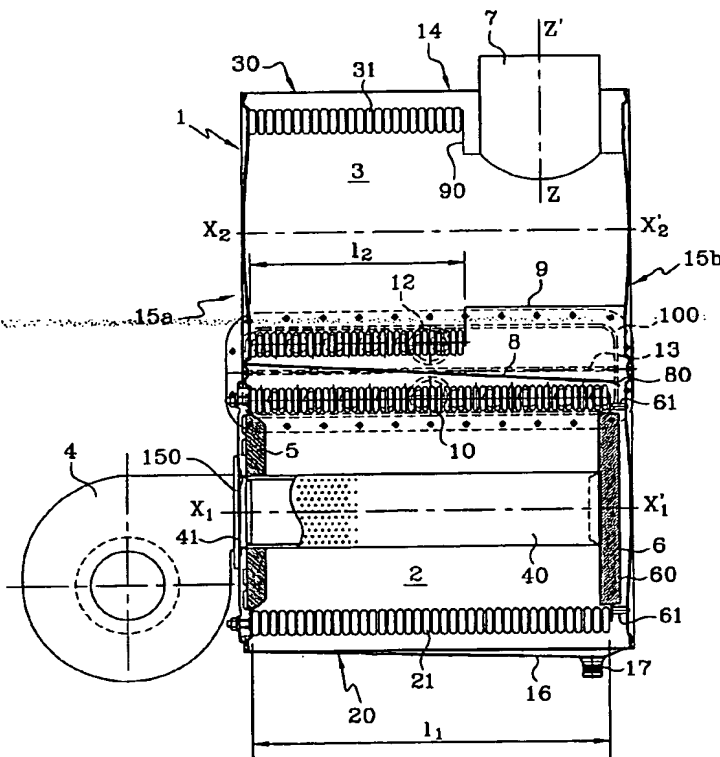
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(54) Title: CONDENSING HEAT EXCHANGER WITH DOUBLE BUNDLE OF TUBES

(54) Titre : ECHANGEUR DE CHALEUR A CONDENSATION A DOUBLE FAISCEAU DE TUBES



(57) Abstract: The invention relates to a heat exchanger comprising a pair of tube bundles (21, 31) through which the fluid to be heated flows, one primary bundle (21) surrounding a cylindrical burner (40) and the other secondary bundle (31) on which the water steam contained in the combustion gas exhausting from the primary bundle is condensed, whereby the tubes forming the bundles have a flattened section and a helicoidal shape, such that the combustion gas flow between the coils, from the inside to the outside for the primary bundle (21) and in the reverse order for the secondary bundle (31), both bundles being arranged inside a same shell (1). Said heat exchanger is characterised in that the axial dimension (l₂) of the secondary bundle is substantially smaller than the axial dimension (l₁) of the primary bundle, such that an available space for an exhaust trunking (7) is provided at the end of said secondary bundle (31). The present invention also relates to a gas- or oil-fired boiler, especially for domestic application, with high efficiency, space saving and reduced weight.

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